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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/694,074	10/27/2003	Nathan R. Belk	073671.0183	3795

5073 7590 12/18/2007

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EXAMINER	
YENKE, BRIAN P	
ART UNIT	**PAPER NUMBER**
2622	

NOTIFICATION DATE	DELIVERY MODE
12/18/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/694,074	BELK, NATHAN R.	
	Examiner	Art Unit	
	BRIAN P. YENKE	2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 October 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-8,10,11,26 and 27* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-8, 10-11, 26 and 27* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 10/04/07 have been fully considered but they are not persuasive.

Applicant's Arguments

a) Applicant states that the examiner does not identify any portion of Birleson that teaches filter 01 being a part of an integrated circuit.

b) Applicant states that filter 101 passes all channels in the Television band, and thus does not communicate a second number of channels less than the first number of channels.

c) Applicant traverses all rejections.

Examiner's Response

a) The examiner disagrees. As the title suggests "Broadband Integrated Television Tuner", and described (col 4, lines 36-40) and throughout the disclosure the invention pertains to the integration of all components of a broadband tuner onto a single integrated substrate (i.e. integrated circuit). In addition Birleson also discloses (same passage) that based upon design, manufacturing and cost considerations certain elements may be embodied as discrete off chip devices.

b) The examiner agrees. The examiner's premise/motivation for such rejection was Birleson discloses receiving all signals in the 55-806Mhz frequency band, it is also noted that there are fixed, mobile and radio astronomy frequencies that lie within this band of frequencies, thus not all frequencies within that band pertain to TV. Thus these frequencies which are not TV band must be rejected either by a conventional filter (404 Fig 4) as shown in the background of Birleson or by filtering such signals after receiving such band, in any event these unwanted frequencies are attenuated/filtered out. Thus the examiner maintains when receiving TV channels, a system which filters the channels initially or subsequently performs the same concept of eliminating undesirable (non-TV) channel/frequencies.

The examiner also noted the decision by the Supreme Court in KSR vs Teleflex wherein it was decided that "If a person of ordinary skill in the art can implement a predictable variation, and would see

the benefit of doing so and 103 likely bars it's patentability." In the instant case the only difference between the applicant's claims and the art of record (Birleson) is the filtering down of channels by a first filter and since this was evidenced as a conventional feature in the prior art, the use of all pass or narrow band filter in receiving TV band signals, ultimately derive the same results of tuning to a desired channel and attenuating/filtering out the non-desired channels, therefore being a predictable variation and obvious over the art of record.

c) The examiner notes that the examiner provided evidence with respect to the notice taken with respect to claims 3-6, thus the issue is resolved/moot. Regarding claim 10, the examiner cites SAkaue, US 5,825,833 which discloses LPF via 1 (Figs 1-2) an input signal.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-8, 10-11 and 26-27 rejected under 35 U.S.C. 103(a) as being unpatentable over Birleson et al., US 6,177,964.

In considering claims 1, 8, 11 and 26,

Birleson discloses a single integrated tuner circuit, which includes a filter 101, filter 109 and filter 113 being part of the tuning circuit (Fig 1). It is noted regarding the dissipating the undesired channels from being sent to the transmitter is a function of placing the filter on the tuner chip—which is stated in the applicant's specification. Birleson discloses that filter 101 in the invention is used to retrieve all TV signals wherein Prior Art the use of a filter to filter some of the channels is traditionally used (col 7, line 56-61). Thus, by simply replacing the filter 101 of Birleson with the conventional filter, would render obvious the pending claims. The use of a filter to receive more frequencies/channels or less frequencies/channels are obvious modifications to one of ordinary skill in the art (as evidenced by the prior art) and thus are not patentable.

In considering claim 2,

Although Birleson may not explicitly recite the number of channels of the 1st/2nd/3rd as claimed, the concept of filtering/tuning down the number of channels received has been evidenced above, and the the specific number of such is not considered patentable since the result is predictable (i.e. no unexpected results are derived from a filter design to filter out a select band of channels).

In considering claims 3-6,

Birleson discloses the reception of over the air and cable broadcast, which meets the plurality of bands of channels, wherein conventional UHF/VHF systems provide the switching being bands of channels, including a plurality of capacitors/inductor as claimed, thus the examiner takes "OFFICIAL NOTICE" regarding such, in the event the applicant disagrees/traverses such notice, the examiner notes applicant's cited EP-1345324.

In considering claims 7 and 27,

Birleson discloses receiving a TV signal in the frequency range of 55MHz-806Mhz which is in the range as claimed (48Mhz-852Mhz).

In considering claim 10,

Birleson does not explicitly recite the use of a LPF, however the use of such in order to attenuate a frequency range are conventional in the art, by the very definition of such filters, thus the examiner takes "OFFICIAL NOTICE" regarding a LPF being used on an input signal.

Conclusion

3. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action

is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Yenke whose telephone number is (571)272-7359. The examiner work schedule is Monday-Thursday, 0730-1830 hrs.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's Supervisor, David L. Ometz, can be reached at (571)272-7593.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(571)-273-8300

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is

(703)305-HELP.

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(TDD) 703-305-7785

An automated message system is available 7 days a week, 24 hours a day providing informational responses to frequently asked questions and the ability to order certain documents. Customer service

representatives are available to answer questions, send materials or connect customers with other offices of the USPTO from 8:30 a.m. - 8:00p.m. EST/EDT, Monday-Friday excluding federal holidays.

For other technical patent information needs, the Patent Assistance Center can be reached through customer service representatives at the above numbers, Monday through Friday (except federal holidays) from 8:30 a.m. to 5:00 p.m. EST/EDT.

The Patent Electronic Business Center (EBC) allows USPTO customers to retrieve data, check the status of pending actions, and submit information and applications. The tools currently available in the Patent EBC are Patent Application Information Retrieval (PAIR) and the Electronic Filing System (EFS). PAIR (http://pair.uspto.gov) provides customers direct secure access to their own patent application status information, as well as to general patent information publicly available. EFS allows customers to electronically file patent application documents securely via the Internet. EFS is a system for submitting new utility patent applications and pre-grant publication submissions in electronic publication-ready form. EFS includes software to help customers prepare submissions in extensible Markup Language (XML) format and to assemble the various parts of the application as an electronic submission package. EFS also allows the submission of Computer Readable Format (CRF) sequence listings for pending biotechnology patent applications, which were filed in paper form.

B.P.Y
10 December 2007

BRIAN P. YENKE
PRIMARY EXAMINER